and determine whether the laser 380 has provided the appropriate cuts and/or seals in the web 302 and the fastener 304. If the optical scanner 450 determines that there is an error in a bag, the bag is pulled from the drum 320 at a rejection station 460, which is shown in FIG. 18. On the other hand, bags meeting the quality criteria observed by the optical scanner 450 are sent to one or more bag collection stations 470.

Page 16, lines 13-17, amend paragraph as follows.

Also shown best in FIG. 23, the drum section <u>330</u> [320] has a plurality of grooves <u>530</u> [430] that interact with the bag rejection station 460 and bag collection stations 470 to remove cut bags from the web 302. Specifically, the rejection station 460 and bag collection stations 470 have fingers that extend into these grooves <u>530</u> [430] to pull the bag from the engaging surface 508.

Page 17, line 22, through page 18, line 9, amend paragraph as follows.

The microprocessor 552 also controls the power to the laser 380 to determine when it should be fired. This is primarily a function of the encoder 554 since the encoder 554 will provide signals indicating that the <u>slots</u> [sots] 514 are in a position to commence laser operation. Further, the microprocessor 552 may control the components in the optical assembly 390, such as galvanometers or steering mirrors, to move the beam across the web 302 and/or fastener 304. Also, if the fastener 304 includes an end clip, like end clip 24 in FIG. 1-6, the optical scanner 450 can determine whether the end-clip is positioned slightly closer to the leading edge or trailing edge of the slot 514. Thus, the microprocessor 552 may trigger the laser 380 to fire a few encoder pulses before or after the central point of the slot 514 to ensure the slightly off-center end-clip is cut at its mid-section. Thus, the optical scanner 450 can be used to "fine tune" the cutting location of the laser 380, or the encoder 554 can be removed completely and the laser 380

would be fired based only on the inputs from the optical scanner 450. Further, because the laser 380 may encounter more stress when cycling on and off, it may be desirable to maintain the laser 380 in an operational state. As such, the microprocessor 552 may determine that the laser 380 should be sent to a neutral or "idle" position where it does not impinge on the web 302 or fastener 304 after a laser processing step has been performed. Thus, the microprocessor 552 may steer the laser beam via the optical assembly 390 to an absorbent heat sink somewhere outside the focal point of the laser beam so that minimal damage to the heat sink occurs over time.

Page 18, lines 15-29, amend paragraph as follows.

The laser 620 can be located outside of the drum 602 along with a galvanometer 625 and an associated f-theta lens 630. Unlike the previous embodiments, the slot 610 has an associated mirror 640 that is fixed to and rotates with the drum 602 so that the mirror 640 is positioned to reflect a laser beam 650 from the laser 620 into the slot 610. While the mirror 640 is flat, it could be curved to collimate or focus the laser beam 650. As shown best in FIG. 25A, the laser beam 650 is guided along a path on the mirror 640 as the drum 602 rotates, which causes the laser beam 650 to move along the slot 610 as the drum 602 rotates. Once the web 606 (and possibly an attached fastener) have been acted upon along the length of the slot 610, the galvanometer 625 moves the laser beam 650 back to the next slot 610 and the process begins again. As such, the path of the laser beam 650 from the f-theta lens 630 to the web 606 may be greater than the radius of the drum 602, which minimizes the angular movement of the galvanometer 625 that is needed for sweeping the laser beam <u>650</u> [625] across the entire length of the slot 610, thereby increasing the processing speed of the system 600.

Page 18, line 30, through page 19, line 7, amend paragraph as follows.

The system <u>600</u> [660] also serves to keep the galvanometer 625 and laser 620 out of the interior of the drum 602. In doing so, the system <u>600</u> [660] can be sealed by a barrier 660 having a window 665. The barrier 660 would allow a vacuum system to suction air from the interior of the drum 602, as opposed to using the side-mounted primary manifold 420 and series of openings 522 (and associated internal manifolds) in the drum sections 330 as described above with reference to FIGS. 16-23. The configuration of this system 600 also permits multiple lasers to process the web 606 on a single drum, either by having two lasers outside the drum 602 at different angular locations on the drum 602, or by using one laser inside the drum 602 to perform one function (e.g., work upon the fastener) and one laser (like the laser 620) outside of the drum 602 to perform a second function (e.g., work upon the web 606).

Page 19, lines 8-21, amend paragraph as follows.

In each of the previous embodiments of FIGS. 1-25, the laser is preferably a CO_2 laser producing a wavelength of about 10 microns, which is efficiently absorbed by the materials in a typical polymeric web and fastener (e.g., polyethylene) and other organic materials. It is also possible to use green (~500 nanometers), blue (~450 nanometers) or UV lasers (< 400 nanometers) since these short wavelengths are absorbed well by most polymers. Lasers producing this range of wavelengths include ion lasers (e.g., argon ion lasers), metal vapor lasers (e.g., copper vapor lasers), excimer lasers (e.g., krypton, fluoride, xenon chloride lasers), and <u>solid-state</u> [sold-state] lasers having converted wavelengths (e.g., 1/2 or 1/3 times the wavelength of a Nd:YAG or a Nd:YVO4 solid-state laser that typically produces energy at 1064 nanometers,). Further, the laser may be an ultra-fast laser with pulse durations of less than 100 picoseconds, although such lasers are more expensive than the previously mentioned types.